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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/990,316	11/21/2001	William G.J. Schofield	AD-294J	2545

7590

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EXAMINER

CRAWFORD, JASON

ART UNIT	PAPER NUMBER
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2819

DATE MAILED: 09/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/990,316	Applicant(s) SCHOFIELD, WILLIAM G.J.	
	Examiner Jason Crawford	Art Unit 2819	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/21/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-12 is/are rejected.
- 7) ☒ Claim(s) 6 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because there are disclosures made without proper labeling in the drawings. Corrections should include adding the labels of 26a. in Fig 2 and in 26b. in Fig 4, in accordance with the specification. Also the outputs labeled in Fig 4 are not in accordance with the specification either, they are labeled as T-Z in the figure but are listed as S-Y in the specification. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 and 8-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Dedic (US 6453218).

In regards to Claim 1, Dedic discloses of a shuffle exchange network (Fig 5 (22)) for receiving 2^n-1 data inputs including a dummy input, which provides 2^n-1 outputs (Column 20 Lines 8-18 and Fig 2). Dedic also discloses of a set of 2^n-1 switches receiving the outputs from the shuffle exchange network (Fig 5 (4₁-4_n)) and a selection circuit for the shuffle exchange network (Fig 5 (24) and Fig 9).

In regards to Claim 2, Dedic discloses of at least one set of shuffle data switches in the shuffle exchange network (Fig 5 (4₁-4_n)).

In regards to Claim 3, Dedic discloses of at least one set of data switches (Fig 5 (4₁-4_n)), Dedic also discloses of the inputs/outputs from the shuffling data switches must be integer powers of 2 (Columns 20 Lines 8-18).

In regards to Claim 4, Dedic discloses of a set of data switches (Fig 5 (4₁-4_n)), in the claims n was not specified nor limited.

Art Unit: 2819

In regards to Claim 5, Dedic discloses of a set of data switches (Fig 5 (4₁-4_n)) in the claims n was not specified nor limited. Dedic also discloses of the inputs/outputs from the shuffling data switches must be integer powers of 2 (Columns 20 Lines 8-18).

In regards to Claim 8, Dedic discloses of a shuffling network, which includes a coding circuit for selectively actuating the switches of the network (Fig 5 (24) and Fig 9).

In regards to Claim 9, Dedic discloses of a shuffling network including a coding circuit for selectively actuating the switches of the network (Fig 5 (24) and Fig 9), which controls each of the output values of the set of switches (Fig 5 (4₁-4_n)).

In regards to Claim 10, Dedic discloses of a shuffling network including a coding circuit for selectively actuating the switches of the network (Fig 5 (24) and Fig 9) that controls each of the output values of the set of switches (Fig 5 (4₁-4_n)) together as a set.

In regards to Claims 11 and 12, Dedic discloses of the use of a sequence generator, specifically a pseudo random number generator in the shuffling network (Fig 9 (56)).

Allowable Subject Matter

Claims 6 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2819

The following is a statement of reasons for the indication of allowable subject matter: The prior art discloses of use of multiplexers as data switches, however it does not disclose of specifically using a 2-to-1 multiplexer for this specific use nor would it have been obvious to one of ordinary skill in the art to do so.

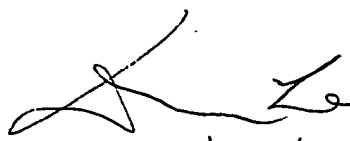
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Crawford whose telephone number is (571) 272-6004. The examiner can normally be reached on Monday - Friday 7am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bob Pascal can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMC


9/14/05

DON LE
PRIMARY EXAMINER